

From qrp-request@Think.COM Tue Jan 25 11:52:50 1994
Date: Tue, 25 Jan 94 08:55:04 PST
From: Michael D Wyman <Michael_D_Wyman@ccm.hf.intel.com>
Subject:

Text item: Text_1

Jeff,

My name is Mike Wyman WB1CWD. I have been active QRP here in Arizona with a number of associates in the Chandler area. I was wondering if we could get together while you are out here provided you are in the Phoenix area to chat QRP a while.

Please let me know what you think . .

73 de Mike Wyman
WB1CWD

From qrp-request@Think.COM Wed Jan 26 01:00:20 1994
Date: Tue, 25 Jan 94 20:00:08 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: 10.14 mhz xmtrs

Gang,

Andrew brought up a good idea - now that we know a source for 10.14 MHZ xtals (the older synthesized CBs) why not take one of those QRP xmtr circuits I posted for, say, 40M and change L and C in the tank and filter sections so they're resonant in the 30M band. 30M seems awfully quiet from my QTH here in Hawaii; even last month while I was in California that band was dead. Let's put some life into it!

Jeff NH6IL

From qrp-request@Think.COM Wed Jan 26 22:32:24 1994
From: andrews@fms.com (Andrew Sargent N80FS)
Subject: Re: 10.14 mhz xmtrs
Date: Wed, 26 Jan 1994 22:28:16 -0500 (EST)

> Date: Tue, 25 Jan 94 20:00:08 HST
> From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
> To: QRP@Think.COM
> Subject: 10.14 mhz xmtrs
> Message-Id: <CMM.0.90.2.759564008.jherman@uhunix3.uhcc.Hawaii.Edu>
> Content-Type: text
>
> Gang,

> Andrew brought up a good idea - now that we know a source for 10.14 MHZ
> xtals (the older synthesized CBs) why not take one of those QRP xmtr
^^

Jeff, Jeff, Jeff... You wern't listening... The 10.14 xtals _only_
come from older 23CH _XTAL_ CB's, not the synthesised ones! I never
immagined that my CB knowledge would come in handy...

> circuits I posted for, say, 40M and change L and C in the tank and filter
> sections so they're resonant in the 30M band. 30M seems awfully quiet
> from my QTH here in Hawaii; even last month while I was in California
> that band was dead. Let's put some life into it!

>
I can't opperate 30M because I'm only a No-Code, but if someone supplies
my with schematics, I will build a few 30M Xtal Xmitters, and sell _or_
raffle off the xmitters to the group only.

>
> Jeff NH6IL
>

Andy (also known as a few other things)

--
Mesmerized by a decade of hate, ! AMATEUR = N80FS
Flowers and remorse, ! ARMY MARS = AAN5HJT
Fading vision lost in time, ! CB = THE NEON KNIGHT
Tragedy on course!!! - Frontline Assembly ! HACKER = TH3 N30N KN16Ht

From qrp-request@Think.COM Thu Jan 27 19:37:55 1994
From: andrews@fms.com (Andrew Sargent N80FS)
Subject: Re: 10.14 mhz xmtrs
Date: Thu, 27 Jan 1994 19:33:27 -0500 (EST)

> Date: Wed, 26 Jan 94 19:46:22 HST
> From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
> To: andrews@telemax.com
> Subject: Re: 10.14 mhz xmtrs
> In-Reply-To: Your message of Wed, 26 Jan 1994 22:28:16 -0500 (EST)
> Message-Id: <CMM.0.90.2.759649583.jherman@uhunix3.uhcc.Hawaii.Edu>
> Content-Type: text

>
> Wrong wrong wrong, Andrew! The 10 MHz and 37 MHz xtals were mixed
> to synthesize the 27 MHz signal! Yes, these xtals come from the older
> 23 ch. CB rigs; the 23 xmt and rcv frequencies were gotten (synthesized)
> by the formula: 37-10=27 MHz (and of course 37+10=47 which is filtered
> out). So rather than 23 xmt xtals and 23 rcv xtals (=46) the manufacturers
> were able to synthesize the required frequencies with only 16 xtals.

>
Hmmm... (I zink vat ve have here iz a failure to communicates) There
is a difference in terminology between 'synthesised' and 'mixed'.
'synthesised' requires the use of a PLL & VCO. 'mixed' is what you

referred to above regarding the old 23 CH CB's. True, it is easier and cheaper to use 16 rocks rather than 46! (including cheaper too!) Keep in mind that _most_ 23 CH CB's (AM/SSB) had '_wierd_' xtal filters also (eg. 11.2735 or 10.6935 + a few others depending on brand and mfgr).

>
> Too bad that out of those 16 xtals only one falls in a ham band: 10.14 mc.

>
Unless you wanted to build a 5X xmitter for 6M!

>
> *****

> Commentary:

> It seems that only a small handful of folks on here are homebrewing. Why
> is that? There's so much talk of this kit or that kit, but so few speak
> of building from scratch. Not enough time? Parts too hard to come by?
> I got licensed in '76 but was building stuff (rcvrs) 10 years prior to
> that. Am I too old fashioned to want to see hams still building at
> least their xmtrs? Phooey!

>
> Jeff NH6IL

Commentary:

I am _still_ a No-Code and proud of it. I am not to be confused with a 2M appliance operator!

--

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From qrp-request@Think.COM Thu Jan 27 20:57:03 1994

From: andrews@fms.com (Andrew Sargent N80FS)

Subject: Re: 10.14 mhz xmtrs

Date: Thu, 27 Jan 1994 19:33:27 -0500 (EST)

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> From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>

> To: andrews@telemax.com

> Subject: Re: 10.14 mhz xmtrs

> In-Reply-To: Your message of Wed, 26 Jan 1994 22:28:16 -0500 (EST)

> Message-Id: <CMM.0.90.2.759649583.jherman@uhunix3.uhcc.Hawaii.Edu>

> Content-Type: text

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From qrp-request@Think.COM Fri Jan 28 14:58:17 1994
Date: Fri, 28 Jan 94 11:57 PST
From: Michael Stein <OSYSMAS@MVS.OAC.UCLA.EDU>
Subject: Re: 10.14 mhz xmtrs

> Hmmm... (I zink vat ve have here iz a failure to communicates)
> There is a difference in terminology between 'synthesised' and
> 'mixed'. 'synthesised' requires the use of a PLL & VCO.

Perhaps in advertising, but not in reality (in the field).

The old CB's used a simple mixing scheme to generate their frequencies, however this is/was a valid (incoherent) synthesis technique and was used for many purposes other than CBs before the current PLL & Coherent synthesis became popular (or practical/known).

There are many frequency synthesis techniques other than the PLL which most people have seen. Some of these techniques include brute-force, harmonic, double-mix, triple-mix, and double-mix-divide. These have different trade-offs than PLLs. These usually cost more...

From qrp-request@Think.COM Tue Jan 25 22:29:29 1994
From: andrews@fms.com (Andrew Sargent N8OFS)
Subject: 10.14 xmitter schematics???
Date: Tue, 25 Jan 1994 22:21:41 -0500 (EST)

Hello gang,

Since 10.14Mhz is in the 30M band, why dosen't somebody design a 5W (or less) xmitter, and I will build them and sell them (QRP mail-list members have first dibbs). I managed to locate 12 10.14 xtals, I'll probably find more.

Just wondering...

BTW, my personal 5.6GHz record is 37.75 miles on 2W Point-to-Point.

--

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Flowers and remorse,	! ARMY MARS =	AAN5HJT
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Tragedy on course!!! - Frontline Assembly	! HACKER =	TH3 N30N KN16Ht

From qrp-request@Think.COM Sat Jan 29 07:24:10 1994
Date: Sat, 29 Jan 94 07:30:06 EST
From: bapplega@isd.csc.com (Bob Applegate)
Subject: 20m & 40m rig designs?

Hi Gang,

I'm looking for a source of schematics for a 20m & 40m QRP rig. These are the features I'd like to have:

20 or 40 meter coverage with a flip of a switch.

VFO tuning of the CW portions of the bands, plus RIT.

Power output in the 2 watt range (no QRPppppp...).

Decent receiver (no DC designs).

Do any of you know if such an animal has been published? Has anyone homebrewed this sort of design?

Thanks es 73,
Bob, WA2ZZX

From qrp-request@Think.COM Wed Jan 26 12:31:43 1994
Date: Wed, 26 Jan 94 09:32:53 PST
From: Raymond.Anderson@EBay.Sun.COM (Ray Anderson)
Subject: re:73

Your second exit was even quicker than your first return.
What would we do without red-tape and management? (Probably quite a bit)

73's,
Ray, WB6TPU

----- Begin Included Message -----

From qrp-request@Think.COM Wed Jan 26 18:51:56 1994
Date: Wed, 26 Jan 94 17:34:34 -0600
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: 40 meters

seems like 40 meters this past week has been hot.

two nights ago, for the first time in over a month, i fired up the K5FO Special on 40 (the only band it'll work on).

heard a W6 calling CQ around 7040 and he was 599, so what the hey. also, he was doing 40wpm. he gave me 539 (stingy S-meter) :-)

no QRM, so he asked me if i could crank it up. of course. so at 70wpm we carried on for a while. he had me clear but i heard an amtor from europe (my guess) just above the noise level.

the W6 was running 1KW and i was at 0.95W. i'll be on tonite.

i have spent some time (the reason why the low level of activity with this group) entering 30+ years of awards data for the QRP ARCI into a PC computer. :-) had to do it to make sure that it was set for eternity.

congrats to Jeff Gold on his highly visible article in the Feb QST. Jeff obviously has too much time on his hands. :-) ;-)

more to follow. the vacation is over.

dit dit
Chuck Adams K5FO CP-60 wpm
adams@sgi.com

From qrp-request@Think.COM Wed Jan 26 22:40:20 1994
From: mvjf@mvubr.att.com
Date: Wed, 26 Jan 94 22:34 EST
Subject: 40 Meters

Chuck,
Yes 40m has been RED hot.
QRPers are easily working them. Never have
imagined this type of DX.

Congrats on your QRQ/QRP/QSO with W6....
Lately some DX signals have sent the NorCal-40 into AGC mode.
The Yugo station running 100W with a 4 el. beam
and the station from Spain with 2 el. and 100w.

On GLN, the 80 meter QRP net tonight run by NN1G, a
German station checked in !!

Can you imagine that..... on 80 M ?

On 40 m, I worked countries #37 and 38 with the
NorCal-40 running 4 watts.

.

73/72 Jim Fitton, W1FMR QRP-NE mvjf@mvubr.att.com

From qrp-request@Think.COM Mon Jan 24 12:12:03 1994
From: randy@cyphyn.radnet.com (Randy)
Subject: 6AG7 is ON the air!
Date: Mon, 24 Jan 1994 09:11:49 -0500 (EST)

Guess what I had for breakfast?

2 contacts on 3710kc using the 6AG7, 1 tube xmit, built upon a strip of wood...using fahnstock clips.

Diagram was of the one I sent along a while back, but in THIS one, I omitted the 100 ohm kathode resistor. (I was lazy)

B+ was 150vdc , using the 150V.R (improved 150volt supply)....and the coil was aprox 6uh, with a 6:1 ratio link-output coil
Tune cap was a AES's 400uuuf job (tune up lands it about 1/2 mesh).
It was mtd on an L bracket to allow easy fastening to the wood...shaft points straight up and I used a knob I 'borrowed' off the TV set.

Contactee's were KB2ANL of Vestal NY who got me at 559 ... I got him 599.
N1NJB of East Orland ME.. got me 479 ... I got him 589.

NOW I'm gonna try 40!...free time willing!

--

Randy KA1UNW	If you get a shock while	
	servicing your equipment,	"Works for me!"
randy@192.153.4.200	DON'T JUMP!	-Pete Keyes
	You might break an expensive tube!	

From qrp-request@Think.COM Mon Jan 24 13:34:02 1994
From: randy@cyphyn.radnet.com (Randy)
Subject: Re: 6AG7 is ON the air!
Date: Mon, 24 Jan 1994 13:31:24 -0500 (EST)

Ok...got some free time today....so...I'll have the 6AG7 on 40 mtrs.

Who knows? Maybe some one here will hear me! Got 3rd contact ...on 40 mtrs so far.

--

Randy KA1UNW	If you get a shock while	
	servicing your equipment,	"Works for me!"
randy@192.153.4.200	DON'T JUMP!	-Pete Keyes
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From qrp-request@Think.COM Wed Jan 26 08:44:38 1994
Date: Wed, 26 Jan 94 15:07:07 GMT

From: jkearman@arrl.org (Jim Kearman)
Subject: 73

My efforts to reduce the hassle factor have apparently backfired,
so I am voluntarily unsubscribing from these groups.

73,

Jim, KR1S

----- End Included Message -----

From qrp-request@Think.COM Wed Jan 26 10:16:04 1994
Date: Wed, 26 Jan 94 15:07:07 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: 73

My efforts to reduce the hassle factor have apparently backfired,
so I am voluntarily unsubscribing from these groups.

73,

Jim, KR1S

From qrp-request@Think.COM Thu Jan 27 11:40:13 1994
From: dquagliana@attmail.com (os2user@vmdoug.utsd.att.com)
Date: 27 Jan 94 16:23:22 GMT
Subject: A cheap L/C meter from frequency measurements

I've heard that it is possible to build a simple inductance and capacitance meter by measuring the audio frequency of a LC audio oscillator. As I understand it, you use a known L and an unknown C (or an unknown L and a known C) and then measure the audio frequency generated by the oscillator. You then plug all the known values into a formula and solve for the unknown.

Now: Has anyone actually built one of these? How did it work? About how (in)accurate was yours? Does anyone have a schematic for something like this?

Yes, I realize that this sort of thing isn't going to have much accuracy. I'm not trying to measure individual component tolerances, but it

would be nice if I could tell if it was a 47 pf or a 470 pf.

Replies to qrp mailing list or email to dquagliana@attmail.com

Douglas Quagliana

dquagliana@attmail.com - I speak for myself, not for AT&T

From qrp-request@Think.COM Thu Jan 27 13:20:57 1994

Date: Thu, 27 Jan 94 13:20:55 -0500

From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;653 CCSG/SCT)

Subject: Re: A cheap L/C meter from frequency measurements

In your message of 27 Jan 1994 at 1307 EST, you write:

> I've heard that it is possible to build a simple inductance and
> capacitance meter by measuring the audio frequency of a LC audio
> oscillator. As I understand it, you use a known L and an
> unknown C (or an unknown L and a known C) and then measure the
> audio frequency generated by the oscillator. You then plug all the
> known values into a formula and solve for the unknown.
>

A simpler solution is a 12VAC xfmr hooked in series with a 10 meg resistor and the unknown component. Measure voltage drop across resistor to get current. Measure voltage drop across unknown component. Compute $Z = E/I$. Use Z formula to compute capacitance or inductance. If 10 meg resistor doesn't work, change to 1 meg, or 100 meg, or 10k....

remember the freq is 60 Hz.

73,

Larry

From qrp-request@Think.COM Thu Jan 27 13:43:36 1994

From: randy@cyphyn.radnet.com (Randy)

Subject: Re: A cheap L/C meter from frequency measurements

Date: Thu, 27 Jan 1994 13:41:27 -0500 (EST)

YES! I made a similar ckt...1st one uses a bridge ckt and is good only for caps (coils DC ohms messes up the true null in such a ckt) but another one I did up was as you said...but was a low freq RF job...run to freq counter etc..

Give me time to do up the 2 diagrams here and I send em out...ok?

--

Randy KA1UNW If you get a shock while
 servicing your equipment, "Works for me!"
randy@192.153.4.200 DON'T JUMP! -Pete Keyes
 You might break an expensive tube!

From qrp-request@Think.COM Thu Jan 27 14:30:39 1994
Date: Thu, 27 Jan 94 14:30:32 EST
From: gc@fox.gsfc.nasa.gov (Gary Chatters)
Subject: Re: A cheap L/C meter from frequency measurements

Douglas asks about building an audio oscillator to measure an unknown L or C. If you already have a variable audio oscillator on your test bench, here is a scheme you might try. I threw it together in about 10 minutes after reading the post to the list. However, I have not made any real practical use of it.

Equipment needed:

Variable frequency audio oscillator

AC voltmeter (high impedance)

A resistor (I used 100K ohm)

Known L and unknown C or vice versa.

Bunch of clip leads.

Frequency counter (optional)

Procedure:

Hook up L and C in parallel circuit.

Feed LC circuit from oscillator through the 100k resistor

Measure the voltage across the LC circuit.

Tune the oscillator to find a voltage peak.

Results of a test:

I used an .088 h toroid coil and a 0.056 microfarad mylar cap in parallel feed through a 100k resistor.

Measured resonant frequency: 2281 Hz.

Using the formula $L = 1.0 / (4 * \pi^2 * f^2 * C)$
(or $L = 1.0 / (4.0 * \pi^{**2} * f^{**2} * C)$ for FORTRAN users)
and the similar formula for C the results are:

	Computed	Labeled
L	0.0869 h	0.088 h
C	0.0553 ufd	0.056 ufd

Comments:

This can be a rather accurate method of measuring unknown L or C, which can make it difficult to use. I had to be within 10% of the resonant frequency to see a reading on the meter. It helped that I knew about where resonance would be.

You can also measure the Q of the resonant circuit.

Is this of any help?

73,

Gary

From qrp-request@Think.COM Thu Jan 27 18:42:29 1994
Date: Thu, 27 Jan 94 15:09:17 EST
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: A cheap L/C meter from frequency measurements

Doug

There are numerous ways to measure L and C, and they can give quite accurate results. Here are a couple that come to mind.

Measuring L

A couple of years ago, QST published an article for an inductance meter. The article was by Doug DeMaw who was capable of directly reading L values for .1uH to hundreds of uH and worked as follows.

Crystal Oscillator-----Parallel L/C Tuned Circuit-----Analog Meter

The crystal oscillator was lightly coupled to a parallel tuned circuit which consisted of a high value variable capacitor and the unknown L. The capacitor was varied to find a peak on the meter. The dial was calibrated in uH because there is one equation for resonance and 2 of the 3 variables were known (F and

C). The ranges were selected by switching different oscillator frequencies.

Another way to measure L is to build a simple oscillator circuit with a fixed amount of capacitance. Then connect an unknown L and measure the frequency with a counter or calibrated receiver. Solve the resonance formula to determine L. You can also measure C values with this approach by using a known L, some know C and adding in the unknown C and taking before and after frequency readings (a single formula can be derived for this situation.

BTW, the basic formula is: $C = 1 / (L W^2)$ where $W = 2 \pi F$

A simple version is $C = 25330.295 / (F^2 L)$ C in pF, L in uH, F in Mhz

Note: The frequencies used in both above techniques need to be appropriate for the typical values being measured.

Measuring C

For large vaues (e.g. .01uF to maybe 100uF) you can build a simple NE555 square wave generator. There are several "how to use the NE555" paper back books with typical circuits. Basically, an R C value determines the frequency. If you use a known R and measure the frequency, you can easily solve for C.

Most of these books also have a real simple circuit using (3) NE555's that allows a frequency counter to read C directly. I built one a while back and it worked quite well and measured C values from a few pF to at least 100uF. It was also an educational experience as it used the NE555 as a square wave generator, a one shot and an integrator.

Back issues of QST, Ham Radio and 73 magazine have lots of articles on this topic.

73

Ed W1AAZ

From qrp-request@Think.COM Thu Jan 27 20:36:29 1994
Date: Thu, 27 Jan 94 15:09:17 EST
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73

Ed W1AAZ

From qrp-request@Think.COM Fri Jan 28 12:07:39 1994
Date: Fri, 28 Jan 1994 07:18:19 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: Re: A cheap L/C meter from frequency measurements

>
> I've heard that it is possible to build a simple inductance and
> capacitance meter by measuring the audio frequency of a LC audio
> oscillator. As I understand it, you use a known L and an
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> would be nice if I could tell if it was a 47 pf or a 470 pf.
>
> Replies to qrp mailing list or email to dquagliana@attmail.com
>
> Douglas Quagliana
> dquagliana@attmail.com - I speak for myself, not for AT&T
>
>

I just built the Doug Demaw Cap meter and it seems to work very good.
The only problem is is that I need to find a 50 ua meter to complete
the project, but in the mean time, I'll use my digital ua meter to
suffice that I won't use the wrong cap in a project. This meter uses
a 2-3mhz oscillator and a fixed inductance to cause resonance, or max current
flow at 1000pf (The intended max measurment)

It also has been designed to distribute the capacitance
measurements uniformly over the 50 ua range, or at least somewhat uniformly.
I don't remember what year/month the meter is, but I'll look tonight.
There is also another article that Doug Demaw wrote for an inductance meter

as well, and I have that dog eared as well. I'll try to get that info soon.

<pre> _ _ _ _ _ / / / / / / < < K O D A K \ \ \ _ _ \ \ _ _ _ _ _ </pre>	Bradley S. Mitchell WB8YGG Eastman Kodak Company KEMD Electronic Products Circuit Board Assembly Dept. 606 Test Engineering 901 Elmgrove Road Rochester, N.Y. 14653-5211 (716) 726-5775, FAX (716) 726-7109 INTERNET: bmitchel@kodak.com
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From qrp-request@Think.COM Wed Jan 26 12:00:20 1994
Date: Wed, 26 Jan 1994 08:44:34 -0800
From: cleveland@gvg47.gvg.tek.com (Grover Cleveland)
Subject: Antenna modeling software

I am in need of inexpensive antenna modeling software. It doesn't need to do anything but wire antennas but must produce accurate plots of horizontal and vertical gain at any height above ground.

Any suggestions?

Grover
WT6P

From qrp-request@Think.COM Wed Jan 26 12:58:30 1994
Date: Wed, 26 Jan 1994 10:58:25 -0700
From: Dave Finley <dfinley@aoc.nrao.edu>
Subject: Any info on QRP Plus?

Has anyone had recent contact with Index Labs or actually seen a QRP Plus transceiver?

A friend of mine called the phone number on the flyer and got a message that the number had been disconnected.

Thanks,

Dave Finley, N1IRZ

From qrp-request@Think.COM Wed Feb 2 22:45:31 1994
From: mvjfm@mvubr.att.com

Date: Wed, 2 Feb 94 22:36 EST
Subject: ARCI QQ

The ARCI QRP Quarterly (QQ) should be in the mail by Friday....
There is a hole on one page where the printer lost a photo....
For the sake of expediency, since the editor is in IL and
printer in TX, it was decided not to hold the presses
but to run without it.....

72/73.... W1FMR

From qrp-request@Think.COM Tue Feb 1 15:32:42 1994
Date: Tue, 01 Feb 1994 14:34:30 -0600 (CST)
From: "JEFF M. GOLD" <JMG@ntech.edu>
Subject: Argosy

Well thanks to Kevin Anderson and a number of people on this
list I do believe I have finally found an Argosy II.

I have been trying to collect some old Ten Tec gear. I have recently got
hold of a Century 21 (just replaced the finals last night... seems to be
working good) and will be receive a Century 22 any day now. I already
have an Argonaut 509 that I use mobile.

I had been checking the Swap and equipment groups religiously, but missed
the .misc group lately.. and of course that is where one finally showed
up.. think I got the first call in.. gave full price with a smile..
suppose to be in mint condition.

Sure would like to find some of the really old stuff.. (didn't they have
seperate TX/REC..think I saw some while I was at the factory).

I have a chance to pick up a Scout.. but think I would rather hold off
and check out the QRP Plus

Time to build more desk space.. I leave all my rigs operational.

PS.. if any of you are straight key or paddle collectors (my other vise)
I have a really different single paddle (I normally use the dual
paddles) really high speed paddle on the way in.. I ordered extra info
sheets incase anyone was interested (Chuck will get one automatically).
Saw it a few times at ham fests.. and tried it out each time. the new
one has a really nice wood finger piece.. so different in design, I
can't explain it. I can almost be understood with a Vibroplex Bug at
this point.. one of my challenges.

Jeff, AC4HF

From qrp-request@Think.COM Thu Feb 3 00:57:45 1994
From: mont@netcom.com (Mont Pierce)
Subject: Re: Articles in QST
Date: Wed, 2 Feb 1994 21:56:45 -0800 (PST)

>
> hi,
> continuing on this drawn out thread..... the february 73 magazine has an
"article", not
> a review of a kit, on an ascii to cw project. provides the schematic, parts
list,
> long article on what's going on, but, no listing of the code for the eprom
program that
> the micro uses. in the parts list the "kit" provider for \$27 will sell you the
micro
> and eeprom with the required code burned along with the source code and software
tools
> to program/modify the code yourself, of course one needs to have a eprom eraser/
programmer
> available to do this. this seems to be a recurring "problem"(?) with the
projects that
> are being published according to the thread on this list. but, from the average
ham i
>.....

Well, actually this ham has provided all parts needed for any builder at
whatever level. You can get the burned prom, along with the source. Or,
you can login to the bbs and download the source for FREE if you already
have the means to make your own proms.

I think this project is being offered in the manner that most of us would
like to see. The complaints have been about some who force you to buy their
preprogrammed proms, etc. and won't let you have the source code. You have
no option to personalize how it works, you have to take what they give you
or do without, unless you can create your own from scratch.

The real problem is that there is a conflict of interests in the minds of
some project designers. We, the general ham public, have gotten used to
the idea of receiving electronic circuit designs for free. Professional
programmers on the otherhand are used to getting a price for their software
creativity, they do it for a living. Even an average computer user cannot
comprehend how much effort and time goes into software development. Software
that is mass produced can be sold for <\$100 and still make a good profit,
because they can sell hundreds of thousands of copies. If they could only
sell a few hundred copies, they would have to charge thousands of dollars

to pay for the software development expenses.

On the otherhand, as I actually have a foot in both doors, the ham world and the professional software programming world, I can understand the hesitation of those project designers who do not reveal their source codes. For now, I think we have to be patient and not worry too much this issue. As most of you net users are aware, there is more and more software becoming available for free on the net. I think this trend will also occur in ham projects requiring software. One thing we could encourage is starting a group of programmers on the net to work together on a programming project.

Just another ham's 2 cents worth...

73,

--

Mont Pierce

```
+-----+
| Ham Call: KM6WT           Internet:  mont@netcom.com      |
|   bands: 80/40/20/15/10/2  IBM vnet:  mont@ibmmail.com    |
|   modes: cw,ssb,fm        |                               |
+-----+
```

From qrp-request@Think.COM Thu Feb 3 23:20:44 1994
From: randy@cyphyn.radnet.com (Randy)
Subject: Bogus call!
Date: Thu, 3 Feb 1994 23:19:17 -0500 (EST)

Excuse my off-topic and crawling in anyones mailbox....

We have, on 80mtrs, a bogus call: W3PXM...who is actually a silent key

This was bumped into in the course of a qso, and some quite deliberate qrm was done...using that call.

As we, in this area (Connecticut, south central) have a 'known' trouble maker who has used others call often and pulled such stunts...it could quite likly be him.

Stalking laws now prevent anyone from verifying if or not it is him/his house so.....

But, at any rate, wanted to warn everyone about that call...it ain't 'PXM

ak! I can hear him right now! using my call!
dirt-bag!

--

Randy KA1UNW If you get a shock while
 servicing your equipment, "Works for me!"
randy@192.153.4.200 DON'T JUMP! -Pete Keyes
 You might break an expensive tube!

From qrp-request@Think.COM Tue Feb 1 01:09:01 1994
Date: Mon, 31 Jan 94 20:08:51 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: Books

Gang,
Here's the complete info on how to get a copy of this wonderful book,
HISTORY OF QRP IN THE U.S.:

A. Weiss WORSP
Milliwatt Books
833 Duke St. #83
Vermillion, South Dakota 57069

\$12 - it'll come first class mail.

Do I recall that the ARRL also sells this?

Jeffrey NH6IL jherman@hawaii.edu

Vietnamese Proverb: If you study you will become what you wish
 If you do not study you will never become anything.

From qrp-request@Think.COM Tue Jan 25 19:52:41 1994
From: bal@ccd.harris.com (Bruce Lifter)
Subject: Building the NN1G Mark II XCVR
Date: Tue, 25 Jan 1994 19:57:29 -0500 (EST)

Our next local club meeting's program is going to be on QRP. I provided
the following article to be included in the corresponding newsletter. I
though you all might also be interested.

73, Bruce

Building the NN1G Mark II XCVR
by Bruce Lifter, KR4AQ

I was interested in building a small QRP rig that would fit in my brief
case that I could take with me when I'm out of town. I really did not want

to dump \$200 into a kit for fear it would not perform that well and I might not get it working. I ran across a few references to the NN1G rig via various internet sources. It was getting pretty good remarks about it and, most important, it was inexpensive (\$59.95). This seemed like pretty low risk, so I went ahead and ordered one from Dan's Small Parts and Kits.

The NN1G Mark II is a 1.5 watt single band superhet transceiver. It was designed around three NE602 IC's (double balanced mixer and oscillator all on a single chip). The rig has a VFO based on the Hartley oscillator and has a crystal filter. According to the documentation provided, the rig is supposed to draw about 30 mA on receive and about 215 mA on transmit.

The kit comes with two silk screened boards (one TX, one Recv), all board mounted components, a 10k audio pot, and a nice air variable capacitor. The air variable is optional. He sells the kit for \$10 less without the air variable. The Air variable he sends depends on what he has on hand. The one I received had a 7:1 reduction drive built in. The kit is for either 80, 40, 30, or 20 meter bands. I ordered the 40 meter kit. The builder must supply the case, hook up wire, and all knobs and connectors.

The documentation that came with the kit consisted of a circuit diagram, 2 pages listing the parts included, 2 pages of parts layout diagrams (one for the TX board and one for the Recv board), an article describing the original NN1G rig by Dave Benson (NN1G) from the January 93 QRP Quarterly, 2 pages of information on building and aligning the NN1G Mark II transceiver (written by NN1G), and a page on putting the NN1G Transceiver on 80/40/30 meters, apparently from another edition of the QRP Quarterly.

This is definitely not a Heath kit! The documentation gives very little instruction on how to put the kit together. There is a few tips provided on building such as not putting the chips in sockets for it may cause one them to oscillate at VHF.

I started by checking the parts provided against the parts list. Everything checked out OK except for two capacitors that were supposed to be 47pf which measured on my multimeter as 470pf. They were marked with 470 which can be interpreted as either 47 or 470.

Not having much experience in building XCVRs, I decided to solder it all together, mount it in its case and then jump right into the alignment procedure. I won't do that again. I got to step 3 in the alignment procedure and found that the local oscillator was not oscillating. This drove me crazy for about a week. To make a long story short, I ended up desoldering all the IC chips and methodically replacing every component in the VFO circuit. The bottom line was that a single 330pf NPO capacitor was bad. The worst part was that I had taken out the bad capacitor, measured it and then put it back in the board again only to later find out that it was the guilty party. I still don't know whats wrong with the cap, it checks out with my meter.

Once I got the LO to oscillate, things went much smoother. I plugged the ICs back in the board and completed the rest of the alignment with little trouble. The alignment procedure was easy to follow and well written.

I installed the rig in a Radio Shack 3 X 5.25 X 5.875 metal cabinet. The boards and air variable fit with plenty of room for future modifications. I have already made two minor mods to the rig. First I added a trimmer cap in parallel to the air variable. This allows me to easily change the start and end frequency of the rig. (The rig has about 80k hertz coverage with air variable supplied with my kit.) The mod does not seem to affect the stability of the VFO. The other mod was also pretty minor; I placed a diode in series with the power supply for polarity protection.

The rig seems to operate quite well. My only complaints so far are in the audio portion of the rig (all of which should be fixed shortly with further minor modifications). The kit, as it comes, does not seem to be able to drive anything other than a set of head phones. The LM386 used in the audio section is supposed to have another 20 dB of gain in reserve. Dan is sending me a mod sheet that will allow the rig to easily drive a 5 inch speaker. My other complaint is that the side tone audio is too low while transmitting. While testing with a strong station across town, I could barely hear my side tone while transmitting. A mod to cure this is already floating around Internet.

Overall I am very pleased with this kit. My main rig is an ICOM 737 without a CW filter. The Mark II is actually easier to listen to at night during noisy band conditions due to its filter. I think I'm ready to build another one for 20 or 30 meters. I talked to Danny Stevig (of Dan's Small Parts and Kits) today and he tells me that he currently has the kits on special, 4/\$200 mix and match the bands.

One more note,... special thanks to Doug Snowden, N4IJ and Dave Rush, W04Z for their patient help in my struggle get the LO working.

--

Bruce Lifter
Harris Corporation
Controls Division

MS: R5-202
email: blifter@ccd.harris.com
Amateur Radio Packet: KR4AQ@N5AUV.#MLB.FL.USA.NA

From qrp-request@Think.COM Tue Jan 25 10:52:19 1994
Date: Tue, 25 Jan 94 10:03:22 EST
From: epacyna@auratek.com (Edward Pacyna)
Subject: Building XTAL Filters

Jeff NH6IL

From qrp-request@Think.COM Sat Jan 22 13:17:54 1994
From: andrews@fms.com (Andrew Sargent N8OFS)
Subject: Re: CB XTALS
Date: Sat, 22 Jan 1994 13:13:57 -0500 (EST)

> Date: Fri, 21 Jan 94 21:17:05 HST
> From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
> To: QRP@Think.COM
> Subject: CB XTALS
> Message-Id: <CMM.0.90.2.759223025.jherman@uhunix.uhcc.Hawaii.Edu>
> Content-Type: text
>
> Gang,
> If you can get your hands on an older CB radio that uses crystal-mixing
> for the frequency synthesis you'll find one of the xtals is 10.140 MHz -
> the top of the 30 meter band!
> Maybe we should start a list as to what electronic gear contains xtals
> that fall in the ham bands. The most famous item on this list would be a
> color TV: the 3579 kc xtal. Randy mentioned you'll find this xtal in
> some touch-tone telephones.
> Now what might have a 7040 kc xtal.....
>
> Jeff NH6IL
>

Well, I'm probably going to become flame-bait here, but I'll speak anyway. I have a @#\$\$load of those rocks from 23CH CB's (I was a rather ambitious CB'er at one time). Here is a list of what I have in the 10MHz range: {10.14 10.16 10.17 10.18 10.595 10.615 10.625 10.635}. Look for _any_ 23CH CB, and you will find 10MHz rocks of one kind or another. BTW, the old imported Sinclair computers used a colorburst xtal for the clock. Or, rip appart some TT-phones for colorburst xtals.

So long for now... (asbestos lined underware zipped)

--

Mesmerized by a decade of hate,	! AMATEUR =	N8OFS
Flowers and remorse,	! ARMY MARS =	AAN5HJT
Fading vision lost in time,	! CB =	THE NEON KNIGHT
Tragedy on course!!! - Frontline Assembly	! HACKER =	TH3 N30N KN16Ht

From qrp-request@Think.COM Wed Feb 2 10:30:52 1994
Date: Wed, 02 Feb 1994 09:33:25 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: Centruy 21..transistors

Hi,

Recently purchased a Century 21 off the net for my future Ten Tec collection.

* anyone know anything about "power mites"?

I had to replace one of the finals.. RF parts had the MRF475 for 9.95. I cross referenced it to a 2SC1969..same as used in the Gary Breeds. The 2sc1969s were \$2.65.. so bought 5 or them.. figured could always use them if I blew one in my GB. Well I had heard that the 21s put out 50 watts. I am looking at the spec.. says.."Final RF pwr Output.. 13W"

They were cheap enough so i replaced both.. figured more likely to be closer matched. (matched sets of MRF475s were like \$25.

I really liked the module design of the Century 21.. while I was in the radio.. replaced some wires that didn't look great.... it was fun. Wasn't real hard to replace the transistors. I think that someone hadn't set the current limiter correctly and that is why the transistor blew. Haven't really looked at it.. but the manual says the finals are suppose to be protected.

The manual also said 25-30 watts. Well couldn't find anything in the book to help me set the two thumb wheel Pots? one I know sets the meter adjust ... the other..current limiter? Played around with them till it seemed about right.. (not really good way.. but works sometimes). Adjusted the power input by checking my Watt meter and noticing at which point the radio was near full power.. coincided with about the right power input level.. so left it alone. The rig seems to loaf at 35-40 watts on 20 meters.

I got on 80 meters and tuned my 10-12-15-17-20 meter quad for 80 meters.. pointed north (the rotor is frozen with our very cold wx) and of course heard a station calling CQ from Guatemala. Now I lost a few other people calling CQ.. not use to the DC receiver.. think they are calling at one freq., I am answering at another.. played with my 850S and adjusted the RIT on the 21 till I seemed to figure out where I needed to be. Answered the CQ and the guy came right back to me... got a good report also. The wattmeter was peaking at about 50 watts and running average over 40.

Those \$2.65 2SC1969s seem to be enjoying themselves and I didn't have the power input up to the suggested level.. going to start going down to QRP now that I know the rig works.

Jeff, AC4HF

From qrp-request@Think.COM Wed Feb 2 12:06:06 1994
Date: Wed, 2 Feb 94 09:08:17 PST
From: Mark E Gustoff <Mark_E_Gustoff@ccm.hf.intel.com>
Subject: Re: Centruy 21..transistors

Jeff:

My Century 21 has 75W input, and it is good for between 25-35W out on most bands. I could do a band by band check tonight, and give you more accurate power out measurements.

72

Mark_E_Gustoff@ccm.hf.intel.com

Hi,

Recently purchased a Century 21 off the net for my future Ten Tec collection.

* anyone know anything about "power mites"?

I had to replace one of the finals.. RF parts had the MRF475 for 9.95. I cross referenced it to a 2SC1969..same as used in the Gary Breeds. The 2sc1969s were \$2.65.. so bought 5 or them.. figured could always use them if I blew one in my GB. Well I had heard that the 21s put out 50 watts. I am looking at the spec.. says.."Final RF pwr Output.. 13W"

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power input level.. so left it alone. The rig seems to loaf at 35-40 watts on 20 meters.

I got on 80 meters and tuned my 10-12-15-17-20 meter quad for 80 meters.. pointed north (the rotor is frozen with our very cold wx) and of course heard a station calling CQ from Guatemala. Now I lost a few other people calling CQ.. not use to the DC receiver.. think they are calling at one freq., I am answering at another.. played with my 850S and adjusted the RIT on the 21 till I seemed to figure out where I needed to be. Answered the CQ and the guy came right back to me... got a good report also. The wattmeter was peaking at about 50 watts and running average over 40.

Those \$2.65 2SC1969s seem to be enjoying themselves and I didn't have the power input up to the suggested level.. going to start going down to QRP now that I know the rig works.

72

Jeff, AC4HF

From qrp-request@Think.COM Fri Feb 4 13:20:36 1994
Date: Fri, 04 Feb 94 18:08:38 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Club Kits for Review

I've changed my mind. It's really not a good idea for QST to review club kits, as they come and go so fast. By the time we got the review in print the stock would be sold out. I understand that some second sources are kitting up parts for some projects, but the parts quality seems to vary all over the landscape, so a review isn't valid.

We MAY consider reviewing commercial kits in the future, sort of a one-shot comparative review of stuff we haven't looked at already. Please don't volunteer to build a kit for us. This hasn't worked out well in the past; we prefer to keep tighter control over assembly, alignment and testing. It's the least we can do for our readers.

By the way, you may be interested in how the process works. A staffer is selected from volunteers, by the Product Review editor, Mark Wilson, AA2Z. The staffer must be qualified, of course. As bad as my eyesight is getting, I'm not sure I'm qualified! The kit is built on the reviewer's time, but testing is done by the lab staff. The reviewer has the option of keeping the kit or being paid for writing the review. In the latter case, the kit

is offered for sealed-bid auction in QST.

73

Jim, KR1S

From qrp-request@Think.COM Tue Feb 1 09:06:46 1994
Date: Tue, 01 Feb 1994 08:09:26 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: coil winding

All,

I checked the instruction sheet on the Radio Kits 20m.. here is what it says and I will tell you why I am somewhat confused:

L1-20T #28 on T30-2, tap at 7 t from ground, -2t link at fround end

*note doesn't say biflar

L3/L4-12t biflar #20 on t30-2-2t link.

Now does that mean on the L3/L4 you wind 12 turns of double wire and then add another 3rd wired for the 2t link? or is L1 really biflar.

thanks

Jeff, AC4HF

From qrp-request@Think.COM Tue Feb 1 14:47:44 1994
Date: Tue, 1 Feb 94 11:56:05 EST
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: coil winding

>

>All,

>

>I checked the instruction sheet on the Radio Kits 20m.. here is what it says and I will tell you why I am somewhat confused:

>

>L1-20T #28 on T30-2, tap at 7 t from ground, -2t link at fround end

>

>*note doesn't say biflar

L1 forms the tuned circuit between the antenna and RX mixer. This is to provide some selectivity in front of the mixer (eliminate out of band

signals that can produce IMD and the mixer image response from being heard while you tune the frequencies of interest), and provide maximum power transfer by matching the antenna to the mixer. Maximum power is transferred when the source Z is equal to the load Z .

The 2 turn secondary link steps up both the low antenna Z and voltage through transformer action. The basic formulas are in every basic book on electronics. In your case the 50 ohm antenna is stepped up to 9,800 ohms across the primary ($(28/2)^2 \times 50$) and the voltage is increased to 14 times the antenna voltage at 50 ohms. The 7 turn tap also provides a transformer between primary of L1 and the mixer. The Z transformation is $(28/7)^2$ or 16:1. Since the single ended NE602 mixer input is 1500 ohms, it will now appear across L1 as 24,000 ohms (1500×16). Note that the antenna is NOT matched to the load and you will have some unnecessary losses. You can change the # of turns in either the link or tap point to correct this (e.g. you want both of the transformed Z 's to be equal for minimum loss).

There is also another consideration, the selectivity. The Q of this circuit is basically $(w L) / R$. Where $w = 2 \pi f$ and R is the total loading on the parallel tuned circuit. There are actually 3 R 's involved. In addition to the two mentioned above, the components themselves have loss (mainly the inductor and the loss is express as an resistance where $R = Q_u w L$, Q_u is the unloaded Q of the inductor. A typical value for the toroid above at 14Mhz would be 150. So the tuned circuit sees; R antenna of 9,800 ohms, R mixer of 24,000 ohms and R component of about 32,000 ohms. The 3 in parallel combine to 2,860 ohms. The tuned circuit Q is about 13 which is a 3dB bandwidth of a little over 1Mhz ($BW = F / Q$). Given that this is a single tuned circuit (not to much attenuation in stop band), the image may be heard. The QRP20 (with a 4Mhz VFO and 10Mhz IF) will probably hear 6Mhz images at night.

So adjust either the link or tap point and build the circuit. The only ticky point is to wind the primary and secondary windings in the same sense (that means same direction and cold and hot ends start and stop at the same end). Also, links are usually wound over the cold end (e.g. ground end) in narrow band tuned circuits and over the center in wide band or center tapped circuits.

>L3/L4-12t biflar #20 on t30-2-2t link.

>

>Now does that mean on the L3/L4 you wind 12 turns of double wire and

>then add another 3rd wired for the 2t link? or is L1 really biflar.

>

Very similar to above discussion. I recall that this circuit is used

between the mixer output and crystal filter. The curve here is that they are using a bifilar winding connected together to make a single primary winding with center tap. The tricky part here is to connect the bifilar winding correctly. Think of it this way. Use two equal lengths wires (one red and one green) and twist them together in a hand drill. Wind the combined wires the correct # of turns (remember every time you pass through the inside of the toroid it is 1 turn). Connect the red wire from one end to the green wire at the other end to make the center tap. The link should be added as above. Since the center tap is formed via a bifilar winding you just wind the link over the primary.

73

Ed W1AAZ

From qrp-request@Think.COM Sun Jan 30 09:47:23 1994
Date: Sun, 30 Jan 1994 08:50:04 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: cw/mobile/qrp

HI,

I have been operating CW/Mobile/QRP for a couple of years now. I have a Ten Tec Argonaut 509, a keyer I built from the ARRL Handbook, and an audio filter that is from the Ten Tec design, but home built, because I couldn't find anyone to sell me one built. I have added some noise suppression via Radio Shack kit.

I use the Schurr solid brass, hand made mini-paddle on an old army? leg brace. .the paddles are the best I ever used.

Sometimes when I really get into it, and I am in the middle of the busiest street in town, I just pull off into a parking lot. People are always stopping by to see what I am doing.. the car is now a little bit noticable with the Texas Bugcatcher on the back of a small Acura Integra. Previously I used a set of whips. The Bug Catcher seems to make the QRP up to 100 watt level.

I offer work a QSO on the way to work (7 miles), at lunch (a couple of miles then I stop where I am going to eat and finish the QSO) and on the way home.

I have only been a ham for about 2 years, I certainly am no CW whiz.. tell you what though.. it really gets you copying in your head after a while.

72

Jeff, AC4HF

From qrp-request@Think.COM Sun Jan 30 22:13:07 1994
Date: Sun, 30 Jan 94 21:12:59 -0600
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: Dayton

Gang,

Dayton is coming up pretty soon.

This is first call for all the qrxpers that are going to Dayton.

email me the following information:

name
call
days you'll be there

First pass at a plan is to meet at the QRP ARCI hospitality suite on Saturday nite at 7pm or 8pm. Hopefully a cross-section of this group will be there and we can meet face-to-face.

Be there and be square..... :-)

dit dit

Chuck Adams K5FO CP-60 wpm
adams@sgi.com

From qrp-request@Think.COM Mon Jan 24 10:13:48 1994
Date: Mon, 24 Jan 94 14:39:44 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Email

The ARRL Board of Directors has set guidelines for electronic mail from Headquarters. Since the League pays for the system, that's fair enough.

If you send me email and you want a response, I need your street address or at least the ARRL Division, so that I can

prepare a copy of the email for your Director. This is done now for paper mail, but hasn't been done for electronic mail.

Any postings I make will also have to be copied, presumably to the entire Board. Therefore, I'll no longer be able to post; I can't handle the additional work involved.

These guidelines do not differentiate between business and private email. All mail emanating from me is considered business related. I'm going to have to investigate private Internet sites.

73

Jim Kearman, KR1S
Assistant Technical Editor

From qrp-request@Think.COM Mon Jan 24 11:10:54 1994
Subject: Re: Email
Date: Mon, 24 Jan 94 11:10:03 EST
From: "John F. Woods" <jfw@ksr.com>

jkearman@arrl.org (Jim Kearman) writes:

> The ARRL Board of Directors has set guidelines for electronic
> mail from Headquarters. Since the League pays for the system,
> that's fair enough.
> If you send me email and you want a response, I need your
> street address or at least the ARRL Division, so that I can
> prepare a copy of the email for your Director. This is done
> now for paper mail, but hasn't been done for electronic mail.
> Any postings I make will also have to be copied, presumably
> to the entire Board. Therefore, I'll no longer be able to
> post; I can't handle the additional work involved.

I think that some board members must have been operating their HTs too close to their heads... ;-))

(Jim, if this wisecrack makes you laugh, remember to record it in triplicate and file it with all the appropriate departments. :-)

73, and good luck finding sane internet access,
John, WB7EEL (now-redfaced ARRL member)

From qrp-request@Think.COM Sun Jan 23 07:41:08 1994
Date: Sat, 22 Jan 94 16:17:53 GMT

From: dick@kanga.demon.co.uk (Dick Pascoe)
Subject: fireball ??

Does anyone know where I can
get any of the crystal oscillators
that were used in the fireball
transmitter ?

Dick G0BPS

--

Richard Pascoe

From qrp-request@Think.COM Mon Jan 31 20:51:46 1994
From: mvjff@mvubr.att.com
Date: Mon, 31 Jan 94 20:43 EST
Subject: Forum FIY

Mr. Ron Moorefield, W8ILC,
Dayton Forum Manager

Thank you for inviting us to speak again on QRP at Hamvention 1994.
Based on the response from last year's forum it was decided
to follow through and expand upon a theme introduced last year.

Please confirm the following arrangements for our Forum.

FORUM: "QRP - Those New Clubs"
Date : 5/1/94 - Sunday
Time : 0930-1100
Room : 3

Speakers and Titles:

Jim Fitton, W1FMR "Coordinating"
Chuck Adams, K5FO "Technical Interest"
Doug Hendricks, KI6DS "Newsletters are Necessary"

This year's forum focuses on 3 key ingredients that could
help to start a successful QRP club in your own area.
"The Excitement is Building" as Chuck, Doug, and Jim show
how they tap into the information superhighway for ideas,
creativity, and technology and generate excitement in their
own QRP clubs.

I hope this meets with your approval.
Please let me know if there are any questions.

W1FMR represents QRP-NE, The New England QRP Club.
K5FO represents NT-QRP, The North Texas QRP Club.
KI6DS represents NorCal-QRP, The Northern California QRP Club.

73, Jim Fitton, W1FMR

From qrp-request@Think.COM Sun Jan 30 16:05:20 1994
Date: Sun, 30 Jan 94 15:05:05 -0600
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: Hambrew

Gang,

last day of January and no January issue of Hambrew received.
it's supposed to have several articles on the new MXM XCVR.
i should have the 20M version finished shortly. i already have
the 40 meter version. this is the \$149.95 + \$5.00 rig that
i posted last year. time flies when you're having fun.

p.s. 1/31/94 0521Z worked an F6 on 40M with 0.95W during their
test. band was HOT HOT HOT.....

dit dit
Chuck Adams K5FO CP-60 wpm
adams@sgi.com

From qrp-request@Think.COM Wed Feb 2 00:33:36 1994
Date: Tue, 1 Feb 94 23:33:28 -0600
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: Hambrew

Gang,

i haven't heard a word, have you?

Hambrew Magazine
P.O. Box 260083
Lakewood, CO 80226-0083
1-800-5-HAM RIG for Ads and Subscriptions

guess it's time to call and find out what's going on.

i did hear indirectly that George (owner, editor, publisher) wants yours truly to write an article, but i think i'll pass.

also of remarkable note: a miracle has happened. i got the sun spot data for every month since 1749, when they were first taken. stand by, this data will appear in an article in QQ, next issue. graphs and all for correlation between QRP activity and the sunspot activity.

ok, back to work.

dit dit

Chuck Adams K5FO CP-60 wpm
adams@sgi.com

From qrp-request@Think.COM Wed Feb 2 08:53:25 1994
Date: Wed, 2 Feb 94 08:33:20 EST
From: jdc@sunsrvr2.cci.com (James D. Cronin)
Subject: Hambrew magazine

According to George, the Post Office is to blame. He sends copies of the magazine out. They never arrive.

73...Jim
N2VNO

From qrp-request@Think.COM Fri Feb 4 00:19:58 1994
Date: Thu, 3 Feb 94 23:19:34 -0600
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: Hambrew Winter 1994 Issue

Gang,

The first issue for 1994 of Hambrew arrived last night. This is the first chance I've had today to sit down and get to type a review, so this is fast and dirty.

48 pages including front and back cover.

Table of Contents:

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A Trio of T/R Switches.....	13
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I'd say there was some improvement, but the jury is still out on the \$20 per year I spent on this puppy.

For me, there is not enough meat between the pages.

I will say that the MXM SuperRX/TX article, on the xtal controlled transmitter and SuperRX receiver, of which I own one, has one of the best jobs of painting of the case and lettering. The case, as it turns out, is one of mine. I did not plan this and Bruce of MXM has some of my cases and George De Grazio, WF0K, built up Bruce's kit and put it in the case. George did do a good job.

dit dit

Chuck Adams K5FO CP-60 wpm
adams@sgi.com

From qrp-request@Think.COM Mon Jan 31 12:47:01 1994
Date: Mon, 31 Jan 1994 11:49:39 -0600 (CST)
From: "JEFF M. GOLD" <JMG@ntech.edu>
Subject: Help: coil winding

HELP!!!

will Ed, Chuck or one of you other experts please help. I am attempting to at least get all the parts on the board of the Radio Kits 20m. I have about everything except components that were not present and 5 coils.

These five coils say at the end of the description things like 2 or 3 turn link. I have never come across this before and can think of many meaning for this... anyone know exactly what is meant.. asked the local guy .. said ..depends on the circuit.

Wrote off for the missing parts.. now can't find the MRF475.. anyone know if I can substitute a SC1969 (higher powered) in that circuit?

Anyone want to finish this and play with it for a couple of months.. I have developed a real hate relationship with it.. haven't had this problem with a construction or repair since I had an old VW bus that I use to fight with all the time.

thanks

72

Jeff, AC4HF

From qrp-request@Think.COM Tue Feb 1 01:22:05 1994
From: jerry@tr2.com
Subject: Re: Help: coil winding
Date: Mon, 31 Jan 1994 21:35:46 +0000 (GMT)

Jeff, AC4HF writes:

>
> HELP!!!
>
> will Ed, Chuck or one of you other experts please help. I am attempting
> to at least get all the parts on the board of the Radio Kits 20m. I have
> about everything except components that were not present and 5 coils.
>
> These five coils say at the end of the description things like 2 or 3
> turn link.

**** That's a separate little winding, two or three turns around the toroid, that is used to transfer power in and out of it without loading down the Q of the tuned circuit. As a rule, a link is wound around the ``cold'' end of the tuned circuit (ground or power); this minimizes capacitive coupling.

It can be interesting and instructive to take a signal generator and a scope, and use them to play with a parallel tuned circuit. You put the tuned circuit across the output of the generator, and measure

the voltage across it with the scope. Sweep the generator... Hmm, not too selective... Now wind a link around the toroid, and connect the signal generator to the link. Sweep again... Wow!! Look at that peak!

You can get a good peak even without the link by putting a big resistor in series with the output of the generator. Say, 100K. That effectively removes the generator's low output impedance from across the tuned circuit, letting it approach its unloaded Q. You could also think of the series resistor as giving the tuned circuit something to work against when it tries to short out the output.

The disadvantage of the big resistor is that you're not transferring much power through the tuned circuit. That's where links come in. They let you freely choose what the load on the tuned circuit is, therefore what its loaded Q is, therefore what its bandwidth is.

You can get pretty much the same effect as a link by just tapping down on the main coil. But when you use toroids, links are easier. They also give you the added benefit of DC isolation.

- Jerry

--

```
*****
* Jerry Kaidor      jerry@tr2.com, jkaidor@synoptics.com      *
*                  KF6VB                                     *
*****
```

From qrp-request@Think.COM Thu Feb 3 22:42:23 1994
Date: Thu, 3 Feb 1994 22:42:12 -0500 (EST)
From: "Andrew M. Cohn" <andy@explorer.clark.net>
Subject: Hotel room QRP operation/antenna

Being in the process of assembling a 5 watt, 40 meter QRP briefcase station, and, after reading some of the mail about qrp antennas, I am concerned about my proposed operation from hotel rooms during my travels. At best, I will have a window that can open. But more typically, my antenna will be confined to the single room. Wonder if anyone sees a glimmer of hope here....

73, andy/k4adl
andy@clark.net

From qrp-request@Think.COM Fri Feb 4 00:39:40 1994
From: randy@cyphyn.radnet.com (Randy)
Subject: Re: Hotel room QRP operation/antenna
Date: Fri, 4 Feb 1994 00:36:20 -0500 (EST)

If you get a shock while

servicing your equipment, "Works for me!"
randy@192.153.4.200 DON'T JUMP! -Pete Keyes
You might break an expensive tube!

From qrp-request@Think.COM Thu Jan 27 14:41:53 1994
Date: Thu, 27 Jan 1994 11:40:22 -0800
From: burdick@interval.com (Wayne Burdick)
Subject: Re: How's the second batch of NorCal's coming?

Kevin Feeney wrote:

>I was wondering if you had any idea what the current status
>of the second batch of Norcals was?

We have all the parts for the NC40's kitted and ready to go, but I'm hand-delivering the custom boxes and PC boards to Jim Cates (who's mailing out the kits) next week. That means first shipments will be the first week of February. Sorry for the delay. (By the way--they're all sold out.)

Let me know how it works (or doesn't--god forbid!) when you get it.

72,
Wayne

From qrp-request@Think.COM Tue Jan 25 11:11:18 1994
Date: Tue, 25 Jan 94 09:09:49 MST
From: jkearman@nyx10.cs.du.edu (Jim Kearman)
Subject: I'm baaack

Now, where were we?...

72/73

Jim, KR1S
jkearman@nyx.cs.du.edu

From qrp-request@Think.COM Tue Jan 25 14:19:32 1994
Date: Tue, 25 Jan 94 9:17:56 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: Re: I'm baaack

Yea! Jim's back! That sure was fast.

Okay now, Gang; no discussing you-know-what so we don't lose you-know-who

again...

Jeff NH6IL

From qrp-request@Think.COM Tue Jan 25 14:55:09 1994

From: randy@cyphyn.radnet.com (Randy)

Subject: Re: I'm baaack

Date: Tue, 25 Jan 1994 14:52:56 -0500 (EST)

>

>

> Now, where were we?...

>

We were plotting and conspiring on how to bury yer boss in copys of all you send out!

===

May I introduce a more cheerful item?

Today and yesterday, I was happy as a clam in mud, with the 6AG7 QRP xmit on 80 & 40 mtrs.

Thats the ckt I sent in the other day.

On that set, I even suprised my self, getting 2 in a row on 80mtrs, yesterday morning!

Now I have to stop, so I can catch up on my QSL's....!

And you thought YOU had trouble!

--

Randy KA1UNW

If you get a shock while
servicing your equipment,

randy@192.153.4.200

DON'T JUMP!

"Works for me!"

-Pete Keyes

You might break an expensive tube!

From qrp-request@Think.COM Tue Jan 25 17:35:15 1994

From: randy@cyphyn.radnet.com (Randy)

Subject: Re: I'm baaack

Date: Tue, 25 Jan 1994 14:52:56 -0500 (EST)

>

>

> Now, where were we?...

>

We were plotting and conspiring on how to bury yer boss in copys of all you send out!

===

May I introduce a more cheerful item?

Today and yesterday, I was happy as a clam in mud, with the 6AG7 QRP xmit on 80 & 40 mtrs.

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On that set, I even suprised my self, getting 2 in a row on 80mtrs, yesterday morning!

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And you thought YOU had trouble!

--

Randy KA1UNW

If you get a shock while
servicing your equipment,

randy@192.153.4.200

DON'T JUMP!

You might break an expensive tube!

"Works for me!"

-Pete Keyes

From qrp-request@Think.COM Wed Jan 26 13:56:54 1994

Date: Tue, 25 Jan 94 22:58:52 GMT

From: dick@kanga.demon.co.uk (Dick G0BPS)

Subject: Re: I'm back (agn)

After all that, he's back
and I thought we has lost him.

Welcome home Jim

--

Dick G0BPS

From qrp-request@Think.COM Fri Feb 4 00:30:30 1994

Date: Thu, 3 Feb 94 23:30:12 -0600

From: adams@chuck.dallas.sgi.com (Chuck Adams)

Subject: K5F0 dit dit

Gang,

On Friday, February 4th, 1994, Chuck Adams, K5F0,
will be leaving the internet. The time for which
I will be gone is dependent upon a number of factors.

I have been going night and day for a lengthy period
of time. I need the rest, so I'm taking a leave of
absence and thus, will lose my place on the net.

You guys and girls have been great and I have throughly
enjoyed the exchanges going on here. There is a wealth
of knowledge and it is my wish that each and everyone
of you continue to keep up the good work. Be good to
each other and yourselves.

Don't keep it to yourselves. Spread the word. QRP and QRPP is here to stay. Get off your laurels and write your experiences, good and bad, and put them in print. Do it in the QQ, QRPP, and start and contribute to local news letters. You learn and so do the readers.

I have met some new friends and will not disappear from the face of the earth. You'll hear my little peanut CW signal on or near the QRP ARCI calling frequencies. If you hear me, holler. I will go at your speed, no matter what it is.

My thanks to each everyone. God Bless and Keep You.

Special thanks to Bruce for keeping the QRP mailing group alive and well. I leave you all in good hands. See you at Dayton.....

dit dit

Chuck Adams, K5F0 and I'm good in the callbook for the last 6 years.

[illegible]

Chuck Adams K5FO CP-60 wpm
adams@sgi.com

From qrp-request@Think.COM Fri Jan 28 14:17:44 1994
Date: Fri, 28 Jan 94 9:17:19 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: L/C meters

All these neat ideas for measuring L and C are great! And here I've been trying to determine the values of variable caps by measuring the plate area and dx between plates; sheesh! I'm still perplexed as to why cap manufacturers don't indicate the range of values of a variable cap on the body of the cap itself.

Anyway, thanks Gang for all the great ideas.

Jeff NH6IL

Vietnamese proverb: If you study you will become what you wish; if you do not study you will never become anything.

From qrp-request@Think.COM Mon Jan 24 02:12:49 1994
Date: Sun, 23 Jan 94 23:11:44 PST
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: March QRPP Table of Contents

I have worked all weekend on the March issue of QRPP. Here is a partial table of contents. I am waiting on a couple of articles that have been promised. It will mail BEFORE the first of March!! Should be a good issue.

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Again, this is not a final list. I am waiting on at least 2 other articles. This one may be 6{4 pages. (Grin). 72, Doug, KI6DS

From qrp-request@Think.COM Sun Jan 30 04:13:03 1994
Date: Sun, 30 Jan 94 01:11:53 PST
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: March QRPp Table of Contents

Here is the final table of contents for the March issue of QRPp, Journal of the NorCal QRP Club. It will be mailed before March 1st. If you are interested in subscribing, send \$5 for 4 issues per year to Jim Cates, WA6GER, 3241 Eastwood Rd., Sacramento, CA 95821. That will make you a member of NorCal. Please include your name, call & address. Foreign subscriptions are \$15 per year, but are mailed airmail. This issue is 72 pages.

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Hope you enjoy this issue. By the way, the club now has 285 members, and sorry, but the NorCal 40 second run of 100 kits is sold out. (In less than 1 month). There will not be any more produced by the club, as we are moving on to our next club project, the Sierra All-Band CW Transceiver, a 6 band rig being designed by Wayne Burdick, N6KR.

72, Doug, KI6DS, Editor, QRPp, Journal of the NorCal QRP Club

From qrp-request@Think.COM Mon Jan 24 13:25:39 1994

Date: Mon, 24 Jan 94 17:53:42 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Misunderstanding

Perhaps I didn't make my previous posting clear enough. Here's how it will work: I will have to send an electronic copy of any email I send, to the Director of the division in which the original recipient lives. This means I will have to determine who the Director is and forward an electronic copy to his or her MCImail account.

I choose not to take the time to go through this exercise. I'm hopeful that, by not posting to the groups, I will stimulate less email that I have to annotate and copy to the directors. I just don't have time. Banging out a quick answer is one thing; this requirement is quite another.

If you need something from me, you can always email me and I'll try to help. On the other hand, if you do not specifically address the email to me, I won't respond.

This policy has nothing to do with expense or perceived wasting of time. The Board simply wants to be aware of what Headquarters staff is saying. We're already required to make copies of all written correspondence; this policy change merely includes electronic correspondence. There were reasons for their decision; it wasn't arbitrary. Last year I waxed philosophical about something and what I said wound up in a club newsletter edited by a challenger for League office, without my prior knowledge! In that same issue were remarks by two other Headquarters staffers, also reprinted without our knowledge or permission. Unfortunately, some other staffers have been indiscrete with postings and remarks, and said things that were considered injurious to the League. You elect the Board to look after the affairs and well-being of the League, and they feel these steps are necessary for them to do their jobs.

Once again, I am voluntarily choosing to not post to either group in the future, merely to save myself some aggravation and potential aggravation. Nobody said I had to. Anyone with a gripe at the League can flame away with impunity, until I catch up to you at a hamfest some day!

You can always call me on the phone: 203-666-1541 ext 279.

Jim, KR1S

From qrp-request@Think.COM Mon Jan 24 15:03:13 1994
Date: 24 Jan 94 15:02:19 EST
From: Kenneth.E.Harker@Dartmouth.EDU (Kenneth E. Harker)
Subject: Re: Misunderstanding

--- Jim Kearman wrote:
This policy has nothing to do with expense or perceived
wasting of time. The Board simply wants to be aware of
what Headquarters staff is saying. We're already required
to make copies of all written correspondence; this policy
change merely includes electronic correspondence.
--- end of quoted material ---

Next thing you know, you'll be working in front of a monitoring video camera,
they'll be recording and analyzing your every keystroke with AI software, and
timing your breaks to the rest room.

_ken/n1pvb

From qrp-request@Think.COM Mon Jan 24 15:21:15 1994
Date: Mon, 24 Jan 1994 15:20:49 -0500 (EST)
From: Robert Marlan <rsm@world.std.com>
Subject: Re: Misunderstanding

Jim,
I have a suggestion, There are several sites on the internet
that let you have a free account which allows mail and usenet
(unlimited) both receive and post. If you like I could help you get one
of these accounts. It would be set up as you personal account and thus
say what you want. You could access it via a simple telnet from where you are.
The return address would be from the account not the league, and thus I would
hope that would free you from problems. It seems like a sad day when the
league impinges upon the fraternity of ham radio, and the best solution is to
down grade technology (ie phone) Have they decided to start taping all
calls..
I believe a former president.... Dick Nixon could h